

Remarks

The foregoing amendments and following remarks are responsive to the October 19, 2004 Office Action. Applicant respectfully requests reconsideration.

Status of the Claims

Claims 9-12 are cancelled. Claims 1-8 and 13-18 were cancelled previously. New Claims 19-24 are added. The pending claims are now 19 to 24.

Support for Newly Added Claims

Support for the newly added claims is found in the specification on page 5, lines 1-28, and in Figure 1a-1i. No new matter has been added.

Amendments to the Specification

The specification has been amended as requested by the Examiner to claim priority to the prior application.

Rejection under 35 U.S.C. § 103

The Examiner rejected Claims 9-12 under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,032,216 to Felten (the Felten patent). The Examiner cited also U.S. Patent 5,601,966 to Kumar (the Kumar patent) in support of the rejection.

The present invention relates to field emitter backplate structures for display panels. The method for forming the backplate structures involves diffusion patterning. Diffusion patterning is a non-etching screen printing chemical process suitable for forming small apertures.

The Felten patent relates to thick film technology and a non-photographic method for making patterns in organic polymer films. The method is intended primarily for use on layers of small thicknesses such as those used in the fabrication of electronic components. The Felten patent does not disclose forming a cathode, or a plurality of cathode electrodes separated by dielectric material as claimed, and hence, does not disclose depositing field emitter material onto at least a portion of the plurality of cathode electrodes.

The Kumar patent relates to methods for fabricating flat panel display systems and components. The method includes forming a conductive line adjacent a face of a substrate, and forming a region of amorphic diamond adjacent a selected portion of the conductive line.

The Examiner has asserted that the Felten patent fails to explicitly disclose the use of the multilayer plate as a multilayer cathode backplate and the plurality of conductors being a plurality of cathodes comprising field emitters. Despite the teaching of the Felten patent in

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column 1, lines 57-68 (cited by the Examiner) concerning the advantages of using diffusion patterning over other conventional methods, the Felten patent fails to teach or suggest a method for making a multilayer cathode backplate as claimed. In addition, the Kumar patent does not teach or suggest modifying the Felten patent to arrive at the claimed method.

It would not have been obvious at the time of the invention to use the process of constructing a multilayer plate structure as disclosed by Felten for the manufacture of multilayer cathode backplates simply in view of the advantages of manufacturing over conventional methods, as alleged by the Examiner. None of the cited patents teaches or suggests depositing a field emitter material onto at least a portion of the plurality of cathode electrodes of an exposed cathode according to the method as claimed. Therefore, the addition of the Kumar patent to the Felten patent fails to cure the deficiencies of the Felten patent, and the rejection should be withdrawn.

Information Disclosure Statement

A Supplemental Information Disclosure Statement is enclosed. Upon considering the reference cited thereon, the Examiner is requested respectfully to sign, date, and return a copy of PTO Form 1449 to the undersigned.

Fees

The requisite fee for the Petition for a one-month Extension of Time is enclosed. No additional fees are believed due. The Commissioner is authorized, however, to charge (or credit any balance) any fees deemed due (or owing) to Deposit Account 04-1928 (E. I. du Pont de Nemours and Company).

Conclusion

It is submitted respectfully that Claims 19 to 24 are now in condition for allowance. A Notice of Allowance is respectfully requested. If anything further is needed to advance the prosecution of the application, the Examiner is urged to contact the undersigned by telephone.

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Dated: February 22, 2005